

SEQUENCE LISTING

<110> Ausubel, Frederick M.
 Staskawicz, Brian J.
 Brent, Andrew F.
 Dahlbeck, Douglas
 Katagiri, Fumiaki
 Kunkel, Barbara N.
 Mindrinos, Michael N.
 Yu, Guo-Liang

<120> RPS2 GENE FAMILY, PRIMERS, PROBES, AND
 DETECTION METHODS

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<150> US 09/301,085

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Glu Leu Gly Ile Cys Gln Asn
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His Ser His Lys Thr Arg Asp Tyr Val Ile Ile Lys Thr Lys Leu Ser
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Gln Arg Ala Asp His Lys Arg Thr Ser Val
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Cys Thr Asp Leu Gly Ser Asn Val Gln Arg Ile Arg Arg Val Tyr Asn
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Asp Arg Arg Lys Gln Ser Phe Glu Asp Ile Gln Ser Phe Glu Thr Glu
35 40 45
Thr Phe Leu Val Val Ala Arg
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Cys Leu Gly Arg Asp Arg Leu Gly Glu Asn Trp Ser Ser Ser Thr
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Met Trp Arg Ile Ala Thr Ser Val Asp His Phe Arg Arg Ser His Gly
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Lys Thr His Met Pro Glu Thr Asp Asn Thr Asp Ala Pro Thr Glu Gly
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Gln Asn Pro Asp Leu Ala
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Leu Gly Val Pro Gly His Thr Arg Arg Phe
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<210> 96
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<400> 96

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 Pro Leu His Lys His Phe Thr Leu Gln Gln Ala Glu Glu Cys Leu Met
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 cattgttttg aaccaccaac ggacgaetta acaagctccc cgaggtgcat gatgaaaatt 180
 gctccagttg ccataaatca cagcccgcctc agcagggagg tcccgtcaca cgcggcaccc 240
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<211> 255

<212> PRT

<213> Arabidopsis thaliana

<400> 106

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Ser	Glu	Ala	Gly	Asp	Leu	Asp	Ala	Arg	Lys	Ser	Ser	Ala	Ser	Ser	Pro
		35					40					45			
Glu	Thr	Arg	Ala	Leu	Leu	Ala	Thr	Lys	Thr	Val	Leu	Gly	Arg	His	Lys
	50					55					60				
Ile	Glu	Val	Pro	Ala	Phe	Gly	Gly	Trp	Phe	Lys	Lys	Lys	Ser	Ser	Lys
65					70				75					80	
His	Glu	Thr	Gly	Gly	Ser	Ser	Ala	Asn	Ala	Asp	Ser	Ser	Ser	Val	Ala
			85					90						95	
Ser	Asp	Ser	Thr	Glu	Lys	Pro	Leu	Phe	Arg	Leu	Thr	His	Val	Pro	Tyr
			100					105					110		
Val	Ser	Gln	Gly	Asn	Glu	Arg	Met	Gly	Cys	Trp	Tyr	Ala	Cys	Ala	Arg
	115						120					125			
Met	Val	Gly	His	Ser	Val	Glu	Ala	Gly	Pro	Arg	Leu	Gly	Leu	Pro	Glu
	130					135					140				
Leu	Tyr	Glu	Gly	Arg	Glu	Ala	Pro	Ala	Gly	Leu	Gln	Asp	Phe	Ser	Asp
145					150				155						160
Val	Glu	Arg	Phe	Ile	His	Asn	Glu	Gly	Leu	Thr	Arg	Val	Asp	Leu	Pro
			165					170						175	
Asp	Asn	Glu	Arg	Phe	Thr	His	Glu	Glu	Leu	Gly	Ala	Leu	Leu	Tyr	Lys
			180				185					190			
His	Gly	Pro	Ile	Ile	Phe	Gly	Trp	Lys	Thr	Pro	Asn	Asp	Ser	Trp	His
	195					200						205			
Met	Ser	Val	Leu	Thr	Gly	Val	Asp	Lys	Glu	Thr	Ser	Ser	Ile	Thr	Phe
	210					215					220				
His	Asp	Pro	Arg	Gln	Gly	Pro	Asp	Leu	Ala	Met	Pro	Leu	Asp	Tyr	Phe
225					230				235					240	
Asn	Gln	Arg	Leu	Ala	Trp	Gln	Val	Pro	His	Ala	Met	Leu	Tyr	Arg	
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			20					25					30		
Val	Asn	Asp	Asp	Asp	Asp	Ser	Thr	Ser	Glu	Val	Asp	Ala	Ile	Ser	Asp
		35					40					45			
Ser	Thr	Asn	Pro	Ser	Gly	Ser	Phe	Pro	Ser	Val	Glu	Tyr	Glu	Val	Phe
	50					55					60				
Leu	Ser	Phe	Arg	Gly	Pro	Asp	Thr	Arg	Glu	Gln	Phe	Thr	Asp	Phe	Leu
65					70					75					80
Tyr	Gln	Ser	Leu	Arg	Arg	Tyr	Lys	Ile	His	Thr	Phe	Arg	Asp	Asp	Asp
				85					90					95	
Glu	Leu	Leu	Lys	Gly	Lys	Glu	Ile	Gly	Pro	Asn	Leu	Leu	Arg	Ala	Ile
			100					105						110	
Asp	Gln	Ser	Lys	Ile	Tyr	Val	Pro	Ile	Ile	Ser	Ser	Gly	Tyr	Ala	Asp
		115					120					125			
Ser	Lys	Trp	Cys	Leu	Met	Glu	Leu	Ala	Glu	Ile	Val	Arg	Arg	Gln	Glu
	130					135					140				
Glu	Asp	Pro	Arg	Arg	Ile	Ile	Leu	Pro	Ile	Phe	Tyr	Met	Val	Asp	Pro
145					150					155					160
Ser	Asp	Val	Arg	His	Gln	Thr	Gly	Cys	Tyr	Lys	Lys	Ala	Phe	Arg	Lys
				165					170					175	
His	Ala	Asn	Lys	Phe	Asp	Gly	Gln	Thr	Ile	Gln	Asn	Trp	Lys	Asp	Ala
			180					185					190		
Leu	Lys	Lys	Val	Gly	Asp	Leu	Lys	Gly	Trp	His	Ile	Gly	Lys	Asn	Asp
		195					200						205		
Lys	Gln	Gly	Ala	Ile	Ala	Asp	Lys	Val	Ser	Ala	Asp	Ile	Trp	Ser	His
	210					215					220				
Ile	Ser	Lys	Glu	Asn	Leu	Ile	Leu	Glu	Thr	Asp	Glu	Leu	Val	Gly	Ile
225					230					235					240
Asp	Asp	His	Ile	Thr	Ala	Val	Leu	Glu	Lys	Leu	Ser	Leu	Asp	Ser	Glu
				245					250					255	
Asn	Val	Thr	Met	Val	Gly	Leu	Tyr	Gly	Met	Gly	Gly	Ile	Gly	Lys	Thr
			260					265					270		
Thr	Thr	Ala	Lys	Ala	Val	Tyr	Asn	Lys	Ile	Ser	Ser	Cys	Phe	Asp	Cys
		275					280					285			
Cys	Cys	Phe	Ile	Asp	Asn	Ile	Arg	Glu	Thr	Gln	Glu	Lys	Asp	Gly	Val
	290					295					300				
Val	Val	Leu	Gln	Lys	Lys	Leu	Val	Ser	Glu	Ile	Leu	Arg	Ile	Asp	Ser
305					310					315					320
Gly	Ser	Val	Gly	Phe	Asn	Asn	Asp	Ser	Gly	Gly	Arg	Lys	Thr	Ile	Lys
			325						330					335	
Glu	Arg	Val	Ser	Arg	Phe	Lys	Ile	Leu	Val	Val	Leu	Asp	Asp	Val	Asp
			340					345					350		
Glu	Lys	Phe	Lys	Phe	Glu	Asp	Met	Leu	Gly	Ser	Pro	Lys	Asp	Phe	Ile
		355					360					365			
Ser	Gln	Ser	Arg	Phe	Ile	Ile	Thr	Ser	Arg	Ser	Met	Arg	Val	Leu	Gly
	370					375					380				
Thr	Leu	Asn	Glu	Asn	Gln	Cys	Lys	Leu	Tyr	Glu	Val	Gly	Ser	Met	Ser
385					390					395					400
Lys	Pro	Arg	Ser	Leu	Glu	Leu	Phe	Ser	Lys	His	Ala	Phe	Lys	Lys	Asn
				405					410					415	
Thr	Pro	Pro	Ser	Ser	Tyr	Tyr	Glu	Thr	Leu	Ala	Asn	Asp	Val	Val	Asp
			420					425					430		
Thr	Thr	Ala	Gly	Leu	Pro	Leu	Thr	Leu	Lys	Val	Ile	Gly	Ser	Leu	Leu
		435					440					445			
Phe	Lys	Gln	Glu	Ile	Ala	Val	Trp	Glu	Asp	Thr	Leu	Glu	Gln	Leu	Arg
	450					455					460				

Arg	Thr	Leu	Asn	Leu	Asp	Glu	Val	Tyr	Asp	Arg	Leu	Lys	Ile	Ser	Tyr
465					470					475					480
Asp	Ala	Leu	Asn	Pro	Glu	Ala	Lys	Glu	Ile	Phe	Leu	Asp	Ile	Ala	Cys
			485						490					495	
Phe	Phe	Ile	Gly	Gln	Asn	Lys	Glu	Glu	Pro	Tyr	Tyr	Met	Trp	Thr	Asp
		500						505					510		
Cys	Asn	Phe	Tyr	Pro	Ala	Ser	Asn	Ile	Ile	Phe	Leu	Ile	Gln	Arg	Cys
	515						520					525			
Met	Ile	Gln	Val	Gly	Asp	Asp	Asp	Glu	Phe	Lys	Met	His	Asp	Gln	Leu
	530				535						540				
Arg	Asp	Met	Gly	Arg	Glu	Ile	Val	Arg	Arg	Glu	Asp	Val	Leu	Pro	Trp
545					550					555					560
Lys	Ser	Arg	Ile	Trp	Ser	Ala	Glu	Glu	Gly	Ile	Asp	Leu	Leu	Leu	Asn
			565						570					575	
Lys	Arg	Lys	Gly	Ser	Ser	Lys	Val	Lys	Ala	Ile	Ser	Ile	Pro	Trp	Gly
		580						585					590		
Val	Lys	Tyr	Glu	Phe	Lys	Ser	Glu	Cys	Phe	Leu	Asn	Leu	Ser	Glu	Leu
	595						600					605			
Arg	Tyr	Leu	His	Ala	Arg	Glu	Ala	Met	Leu	Thr	Gly	Asp	Phe	Asn	Asn
	610					615					620				
Leu	Leu	Pro	Asn	Leu	Lys	Trp	Leu	Glu	Leu	Pro	Phe	Tyr	Lys	His	Gly
625					630					635					640
Glu	Asp	Asp	Pro	Pro	Leu	Thr	Asn	Tyr	Thr	Met	Lys	Asn	Leu	Ile	Ile
			645						650					655	
Val	Ile	Leu	Glu	His	Ser	His	Ile	Thr	Ala	Asp	Asp	Trp	Gly	Gly	Trp
		660						665					670		
Arg	His	Met	Met	Lys	Met	Ala	Glu	Arg	Leu	Lys	Val	Val	Arg	Leu	Ala
		675					680					685			
Ser	Asn	Tyr	Ser	Leu	Tyr	Gly	Arg	Arg	Val	Arg	Leu	Ser	Asp	Cys	Trp
	690					695					700				
Arg	Phe	Pro	Lys	Ser	Ile	Glu	Val	Leu	Ser	Met	Thr	Ala	Ile	Glu	Met
705					710					715					720
Asp	Glu	Val	Asp	Ile	Gly	Glu	Leu	Lys	Lys	Leu	Lys	Thr	Leu	Val	Leu
			725						730					735	
Lys	Pro	Cys	Pro	Ile	Gln	Lys	Ile	Ser	Gly	Gly	Thr	Phe	Gly	Met	Leu
		740						745					750		
Lys	Gly	Leu	Arg	Glu	Leu	Cys	Leu	Glu	Phe	Asn	Trp	Gly	Thr	Asn	Leu
	755					760						765			
Arg	Glu	Val	Val	Ala	Asp	Ile	Gly	Gln	Leu	Ser	Ser	Leu	Lys	Val	Leu
	770					775					780				
Lys	Thr	Gly	Ala	Lys	Glu	Val	Glu	Ile	Asn	Glu	Phe	Pro	Leu	Gly	Leu
785					790					795					800
Lys	Thr	Glu	Leu	Ser	Thr	Ser	Ser	Arg	Ile	Pro	Asn	Asn	Leu	Ser	Gln
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gtctctttta	tggtaaagac	gcagagaaga	ttttgaggaa	gatgccaaaa	ttgagaaaat	2940
tgagttgcat	attttcaggg	acatttggtt	attcaaggaa	attgaagggt	aggtgtgttc	3000
gttttccag	attagatttt	ctaagtcacc	ttgagtcctt	caagctgggt	tcgaacagct	3060
atccagccaa	acttcctcac	aagttcaatt	tccctctgca	actaagggaa	ctgactttat	3120
caaagttccg	tctaccttgg	acccaaattt	cgatcattgc	agaactgccc	aacttggtga	3180
ttcttaagtt	attgctcaga	gcctttgaag	gggatcactg	ggaagtga	gattcagagt	3240
tcctagaact	caaatactta	aaactggaca	acctcaaagt	tgtacaatgg	tccatctctg	3300
atgatgcttt	tcctaagctt	gaacatttgg	ttttaacgaa	atgtaagcat	cttgagaaaa	3360
tccttctctg	ttttgaagat	gctgtttgtc	taaatagagt	tgaggtgaac	tggtgcaact	3420
ggaatgttgc	caattcagcc	caagatatcc	aaactatgca	acatgaagtt	atagcaaatg	3480
attcattcac	agttactata	cagcttccag	attggtctaa	agaacagccc	cttgactctt	3540
agcaaagggt	tgttcttgc	gtgttcaccc	aagtgcattt	aacattttatt	cattttgttt	3600
tacaccagaa	catgtttatt	ttgctagtat	tacttgatac	attaaaagaa	atcgaactca	3660
tatttctgct	acagtcttaa	cttttcttgg	gcttacttga	ggtctagatt	agatcaatgg	3720
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atattgttat	ccctagccaa	atttattatg	ttcaaataga	aactgatgtc	acaactactt	3840
ttttgtgaaa	tgtttttgaa	ttttttgcta	taaaattgac	gaattgacag	cttctatatt	3900
tgtcagctaa	actctttgtc	accagaagtg	tatttagaat	tactgtgggt	ttatgaaaga	3960
gttctgtaga	attttatgct	tttgacagaat	atagttttaa	acaacaacac	ttctctgttt	4020
cagagatagc	agaagctaaa	gttcaaggca	ttttgtttat	ttctagaaca	agtggagttc	4080
ttatgttgaa	ttcttgaaaa	gaagaagaat	caggagcagg	taaagttatc	tctttttatg	4140
tttttcttct	tttagatggt	atttcttcat	cttgaacgtg	aacaccgctg	aaagcatttt	4200
aataaaaccg	gagagaaaaa	taagatcttt	ttatataaag	cattatcatg	taaatatgcc	4260
taaatccata	tgggtacaact	gtttgacaaa	atgatagaga	ggggagtttt	atagtataag	4320
taaaacagga	ttgagaaaaa	aatccttgca	cgattttcaa	tttctggcca	catcacaatg	4380
tgtgtcaaa	ttccctctct	taagtggaa	aagcaatcag	aaaagctcat	tcttatcggt	4440
gacataccaa	taccagctga	ctgtctcctc	ttgggttaact	tagccttgct	tacttagact	4500
attagattag	ttactaatga	actggtaaat	tggaaaccaa	tgtagttagc	ttgatgagct	4560
ggtagacatg	tatatatgaa	gatacacgcg	taactttagt	cgatgggttaa	tttttcattt	4620
ttgatttttt	ttcttcacag	agtatatatg	aacttggcct	aaaagttttg	cttcactaat	4680
ttaactatta	ccgtggatga	aacaagcatg	gcaacatttt	caacaactat	cactcaagca	4740
atgtaaaaaa	tggaggttct	acgagcggta	catgtaagag	ttttgtgcac	acaagagggt	4800
ctgagacttg	aaccatccat	gtccaaggca	gttgagatgc	tagtaaagaa	agaagaagat	4860
gagcctgcac	taattaatct	ccctgtatga	atgagagaat	gagaaaaaga	tggagcttca	4920
tgaacaaaaa	gttacctttt	tttttcttct	ttaatggcat	tactttgaag	cacatgtttg	4980

ttagttgtaa attgtaatgg tgaagtgttt gtaaataatag ggagtgatat ttgaaagaat	5040
ggttgtgtta tctttacaaa ccggaatcat ttctgtataa ttttcttctg taatttttgg	5100
tttcggttta ttcattactc atttcagtaa gctt	5134

<210> 158
 <211> 26
 <212> DNA
 <213> Arabidopsis thaliana

<220>
 <221> misc_feature
 <222> (1)...(26)
 <223> n = A,T,C or G

<400> 158	
ggnatgggng gnntnggnaa racnac	26

<210> 159
 <211> 20
 <212> DNA
 <213> Arabidopsis thaliana

<220>
 <221> misc_feature
 <222> (1)...(20)
 <223> n = A,T,C or G

<400> 159	
ncgngwngtn akdawncgna	20

<210> 160
 <211> 17
 <212> DNA
 <213> Arabidopsis thaliana

<220>
 <221> misc_feature
 <222> (1)...(17)
 <223> n = A,T,C or G

<400> 160	
ggwntbggwa arachac	17

<210> 161
 <211> 33
 <212> DNA
 <213> Arabidopsis thaliana

<220>
 <221> misc_feature
 <222> (1)...(33)
 <223> n = A,T,C or G

<400> 161	
nrynrdngtn gtyttncna nccnssnrk ncc	33

<210> 162

<211> 26
<212> DNA
<213> Arabidopsis thaliana

<220>
<221> misc_feature
<222> (1)...(26)
<223> n = A,T,C or G

<400> 162
ggmynssng gnntnggnaa racnac

26

<210> 163
<211> 13
<212> DNA
<213> Arabidopsis thaliana

<400> 163
tygaygayrt bra

13

<210> 164
<211> 16
<212> DNA
<213> Arabidopsis thaliana

<220>
<221> misc_feature
<222> (1)...(16)
<223> n = A,T,C or G

<400> 164
tyccavayrt crtcna

16

<210> 165
<211> 26
<212> DNA
<213> Arabidopsis thaliana

<220>
<221> misc_feature
<222> (1)...(26)
<223> n = A,T,C or G

<400> 165
vymnayrtcr tcnadnavna nnarna

26

<210> 166
<211> 26
<212> DNA
<213> Arabidopsis thaliana

<220>
<221> misc_feature
<222> (1)...(26)
<223> n = A,T,C or G

<400> 166
wwnmrrdtnt tntnbtnt ngayga

26

<210> 167
<211> 21
<212> DNA
<213> Arabidopsis thaliana

<220>
<221> misc_feature
<222> (1)...(21)
<223> n = A,T,C or G

<400> 167
ncgngwngtn akdawnegng a

21

<210> 168
<211> 21
<212> DNA
<213> Arabidopsis thaliana

<220>
<221> misc_feature
<222> (1)...(21)
<223> n = A,T,C or G

<400> 168
ncknswngtn addatdaatn g

21

<210> 169
<211> 12
<212> DNA
<213> Arabidopsis thaliana

<220>
<221> misc_feature
<222> (1)...(12)
<223> n = A,T,C or G

<400> 169
narnggnarn cc

12

<210> 170
<211> 17
<212> DNA
<213> Arabidopsis thaliana

<400> 170
ggwytbccwy tbgchyt

17

<210> 171
<211> 17
<212> DNA
<213> Arabidopsis thaliana

<220>
<221> misc_feature
<222> (1)...(17)
<223> n = A,T,C or G

<400> 171
ardgcvarwg gvarncc

17

<210> 172
<211> 24
<212> DNA
<213> Arabidopsis thaliana

<220>
<221> misc_feature
<222> (1)...(24)
<223> n = A,T,C or G

<400> 172
nrnnwynavn shnarnggna rncc

24

<210> 173
<211> 17
<212> DNA
<213> Arabidopsis thaliana

<220>
<221> misc_feature
<222> (1)...(17)
<223> n = A,T,C or G

<400> 173
ggnytnccny tndsnbt

17

<210> 174
<211> 20
<212> DNA
<213> Arabidopsis thaliana

<400> 174
arrttrtcrtrt adswrawytt

20

<210> 175
<211> 20
<212> DNA
<213> Arabidopsis thaliana

<220>
<221> misc_feature
<222> (1)...(20)
<223> n = A,T,C or G

<400> 175
arnyyntyrt ansrnannyy

20

<210> 176
<211> 20
<212> DNA
<213> Arabidopsis thaliana

<220>
<221> misc_feature
<222> (1)...(20)
<223> n = A,T,C or G

<400> 176
rrnwthwsnt ayanrvny

20

<210> 177
<211> 20
<212> DNA
<213> Arabidopsis thaliana

<220>
<221> misc_feature
<222> (1)...(20)
<223> n = A,T,C or G

<400> 177
gtnttyytnw snttymgrgg

20

<210> 178
<211> 23
<212> DNA
<213> Arabidopsis thaliana

<220>
<221> misc_feature
<222> (1)...(23)
<223> n = A,T,C or G

<400> 178
ccnathtttyt ayrwbgtnga ycc

23

<210> 179
<211> 17
<212> DNA
<213> Arabidopsis thaliana

<220>
<221> misc_feature
<222> (1)...(17)
<223> n = A,T,C or G

<400> 179
gtnggnathg ayrmnca

17

<210> 180
<211> 21
<212> DNA
<213> Arabidopsis thaliana

<220>
<221> misc_feature
<222> (1)...(21)
<223> n = A,T,C or G

<400> 180
raarcangcd atrtcnarra a

21

<210> 181
<211> 20
<212> DNA
<213> Arabidopsis thaliana

<220>
<221> misc_feature

<222> (1)...(20)

<223> n = A,T,C or G

<400> 181

ttyytngaya thgcntgytt

20

<210> 182

<211> 26

<212> DNA

<213> Arabidopsis thaliana

<220>

<221> misc_feature

<222> (1)...(26)

<223> n = A,T,C or G

<400> 182

cccatrtcyy knadnwrrtc rtgcat

26

<210> 183

<211> 26

<212> DNA

<213> Arabidopsis thaliana

<220>

<221> misc_feature

<222> (1)...(26)

<223> n = A,T,C or G

<400> 183

atgcaygayy wnhtnmrrga yatggg

26

<210> 184

<211> 15

<212> DNA

<213> Arabidopsis thaliana

<220>

<221> misc_feature

<222> (1)...(15)

<223> n = A,T,C or G

<400> 184

narnswytyn arytt

15

<210> 185

<211> 17

<212> DNA

<213> Arabidopsis thaliana

<220>

<221> misc_feature

<222> (1)...(17)

<223> n = A,T,C or G

<400> 185

wsnaarytnr arwsnyt

17

<210> 186

<211> 21
<212> DNA
<213> Arabidopsis thaliana

<220>
<221> misc_feature
<222> (1)...(21)
<223> n = A,T,C or G

<400> 186
dwwytcnarn swnyknarn c

21

<210> 187
<211> 17
<212> DNA
<213> Arabidopsis thaliana

<220>
<221> misc_feature
<222> (1)...(17)
<223> n = A,T,C or G

<400> 187
ggnytnmrnw snytn ga

17

<210> 188
<211> 13
<212> PRT
<213> Arabidopsis thaliana

<400> 188
Leu Lys Phe Ser Tyr Asp Asn Leu Glu Ser Asp Leu Leu
1 5 10

<210> 189
<211> 16
<212> PRT
<213> Arabidopsis thaliana

<400> 189
Gly Val Tyr Gly Pro Gly Gly Val Gly Lys Thr Thr Leu Met Gln Ser
1 5 10 15

<210> 190
<211> 14
<212> PRT
<213> Arabidopsis thaliana

<400> 190
Gly Gly Leu Pro Leu Ala Leu Ile Thr Leu Gly Gly Ala Met
1 5 10

<210> 191
<211> 11
<212> PRT
<213> Arabidopsis thaliana

<220>
<221> VARIANT
<222> (2)...(2)
<223> Xaa is Met or Pro

<221> VARIANT
<222> (3)...(3)
<223> Xaa is Gly or Pro

<221> VARIANT
<222> (5)...(5)
<223> Xaa is Ile, Leu or Val

<221> VARIANT
<222> (10)...(10)
<223> Xaa is Ile, Leu or Thr

<221> VARIANT
<222> (11)...(11)
<223> Xaa is Ala or Met

<400> 191
Gly Xaa Xaa Gly Xaa Gly Lys Thr Thr Xaa Xaa
1 5 10

<210> 192
<211> 11
<212> PRT
<213> Arabidopsis thaliana

<220>
<221> VARIANT
<222> (1)...(11)
<223> Xaa at 1 is Phe or Lys; Xaa at 2 is Arg or Lys;
Xaa at 3 is Ile, Val or Phe; Xaa at 5 is Ile, Leu
or Val; Xaa at 6 is Ile or Leu; Xaa at 7 is Ile or
Val; Xaa at 10 is Ile, Leu or Val; Xaa at 11 is
Asp or Trp;

<400> 192
Xaa Xaa Xaa Leu Xaa Xaa Xaa Asp Asp Xaa Xaa
1 5 10

<210> 193
<211> 8
<212> PRT
<213> Arabidopsis thaliana

<220>
<221> VARIANT
<222> (1)...(8)
<223> Xaa at 1 is Ser or Cys; Xaa at 2 is Arg or Lys;
Xaa at 3 is Phe, Ile or Val; Xaa at 4 is Ile or
Met; Xaa at 5 is Ile, Leu or Phe; Xaa at 7 is Ser,
Cys or Thr;

<400> 193

Xaa Xaa Xaa Xaa Xaa Thr Xaa Arg
1 5

<210> 194
<211> 8
<212> PRT
<213> Arabidopsis thaliana

<220>
<221> VARIANT
<222> (1)...(8)
<223> Xaa at 5 is Thr, Ala or Thr; Xaa at 6 is Leu or
Val; Xaa at 7 is Ile, Val or Lys; Xaa at 8 is Val
or Thr;

<400> 194
Gly Leu Pro Leu Xaa Xaa Xaa Xaa
1 5

<210> 195
<211> 7
<212> PRT
<213> Arabidopsis thaliana

<220>
<221> VARIANT
<222> (1)...(7)
<223> Xaa at 1 is Lys or Gly; Xaa at 2 is Ile or Phe;
Xaa at 5 is Asp or Lys; Xaa at 6 is Ala, Gly or
Asn;

<400> 195
Xaa Xaa Ser Tyr Xaa Xaa Leu
1 5

<210> 196
<211> 4
<212> PRT
<213> Arabidopsis thaliana

<400> 196
Asn Ser His Arg
1

<210> 197

<400> 197
000

<210> 198
<211> 4
<212> PRT
<213> Arabidopsis thaliana

<400> 198
Thr Gly Asp Leu
1

<210> 199
<211> 4
<212> PRT
<213> Arabidopsis thaliana

<400> 199
His Gly Thr Tyr
1

<210> 200
<211> 11
<212> PRT
<213> Arabidopsis thaliana

<400> 200
Arg Met Ser His Gly Phe Arg Asn Ser Gln Ser
1 5 10

<210> 201
<211> 27
<212> PRT
<213> Arabidopsis thaliana

<400> 201
Gly Glu Met Val Glu Ser Thr Gly Lys Arg Ser Thr Lys Arg Arg Ala
1 5 10 15
Leu Leu Phe Thr Ala Leu Cys Ser Lys Leu Ile
20 25

<210> 202
<211> 9
<212> PRT
<213> Arabidopsis thaliana

<220>
<221> VARIANT
<222> (1)...(9)
<223> Xaa at position 5 is Met or Asp

<400> 202
Pro Ile Phe Tyr Xaa Val Asp Pro Ser
1 5

<210> 203
<211> 6
<212> PRT
<213> Arabidopsis thaliana

<220>
<221> VARIANT

<222> (1)...(6)
<223> Xaa at position 5 is Asp or Thr

<400> 203
Val Gly Ile Asp Xaa His
1 5

<210> 204
<211> 9
<212> PRT
<213> Arabidopsis thaliana

<220>
<221> VARIANT
<222> (1)...(9)
<223> Xaa at position 1 is Gln or Leu; Xaa at position 2
is Leu or Ile; Xaa at position 3 is Arg or Gln.

<400> 204
Met His Asp Xaa Xaa Xaa Asp Met Gly
1 5

<210> 205
<211> 6
<212> PRT
<213> Arabidopsis thaliana

<400> 205
Ser Lys Leu Lys Ser Leu
1 5

<210> 206
<211> 8
<212> PRT
<213> Arabidopsis thaliana

<220>
<221> VARIANT
<222> (1)...(8)
<223> Xaa at position 3 is Arg or His; Xaa at position 7
is Ile or Tyr.

<400> 206
Gly Leu Xaa Ser Leu Glu Xaa Leu
1 5

<210> 207
<211> 6
<212> PRT
<213> Arabidopsis thaliana

<400> 207
Ser Lys Leu Lys Ser Leu
1 5

<210> 208
<211> 7
<212> PRT
<213> Arabidopsis thaliana

<400> 208
Lys Phe Ser Tyr Asp Asn Leu
1 5

<210> 209
<211> 23
<212> PRT
<213> Arabidopsis Thalia

<220>
<221> VARIANT
<222> 2,3,5,6,8,9,11,12,14,16-9,21,22
<223> Xaa=any amino acid

<221> VARIANT
<222> 4,15,20,23
<223> Xaa=L or I or V

<400> 209
Pro Xaa Xaa Xaa Xaa Xaa Leu Xaa Xaa Leu Xaa Xaa Leu Xaa Xaa Xaa
1 5 10 15
Xaa Xaa Xaa Xaa Xaa Xaa Xaa
20

<210> 210
<211> 23
<212> PRT
<213> Yeast

<220>
<221> VARIANT
<222> 2,3,5,6,8,9,11,12,14,16,17,19,21,22
<223> Xaa= any amino acid

<221> VARIANT
<222> 4,20,23
<223> Xaa=L or I or V

<400> 210
Pro Xaa Xaa Xaa Xaa Xaa Leu Xaa Xaa Leu Xaa Xaa Leu Xaa Leu Xaa
1 5 10 15
Xaa Asn Xaa Xaa Xaa Xaa Xaa
20

<210> 211
<211> 12
<212> PRT
<213> Arabidopsis thaliana

<220>
<221> VARIANT

<222> 2,3,5,6,8,9,11
<223> Xaa=any amino acid

<221> VARIANT
<222> 1
<223> Xaa=I or L or V

<221> VARIANT
<222> 10
<223> Xaa=I or L

<400> 211
Xaa Xaa Xaa Leu Xaa Xaa Leu Xaa Xaa Xaa Xaa Leu
1 5 10

<210> 212
<211> 7
<212> PRT
<213> Arabidopsis thaliana

<220>
<221> VARIANT
<222> 1
<223> Xaa=I or R

<221> VARIANT
<222> 2,5-7
<223> Xaa=any amino acid

<400> 212
Xaa Xaa Asp Leu Xaa Xaa Xaa
1 5

<210> 213
<211> 8
<212> PRT
<213> Arabidopsis thaliana

<400> 213
Gly Pro Gly Gly Val Gly Lys Thr
1 5

<210> 214
<211> 16
<212> PRT
<213> Arabidopsis thaliana

<400> 214
Thr Tyr Gly Ala Tyr Gly Ala Tyr Arg Thr Asx Tyr Arg Asx Arg Ala
1 5 10 15